

Amendments to the Claims

The current listing of the claims replaces all previous amendments and listings of the claims.

1. (Currently Amended) A method for measuring the spin in an optical fibre by irradiating an optical fibre with light so as to form an interference pattern, characterized in that the ovality of the optical fibre, which results in a continuously changing interference pattern, is used for possessing an inherently small ovality, comprising:

continuously irradiating an optical fibre with incident light so as to form an interference pattern that is a function of a wavelength of the incident light, a refractive index of the fibre, and a diameter of the fibre;

calculating a shift of the interference pattern in real time; and
determining the spin in the optical fibre based on the calculated shift in the interference pattern.

2. (Currently Amended) [[A]] The method according to claim 1, characterized in that the interference pattern comprises the range wherein continuously irradiating comprises continuously irradiating the optical fibre and measuring the interference pattern at an angle between 48° and 72° to the incident light, which range is obtained by irradiating the optical fibre with light in a direction perpendicularly to the direction of movement thereof.

3. (Currently Amended) [[A]] The method according to claim 1, characterized in that the interference pattern is measured during the drawing process for producing the optical fibre from the molten preform, in particular at a wherein continuously irradiating comprises continuously irradiating the optical fibre and measuring the interference pattern while the optical fibre is drawn at a drawing speed [>] greater than 10 m/s.

4. (Currently Amended) [[A]] The method according to claim 1, characterized in that the spin measured from the continuously changing interference pattern is related to the functioning of the device that is used for further comprising:

imparting the spin to the optical fibre prior to continuously irradiating the optical fibre.

5. (Currently Amended) [[A]] The method according to claim [[4]] 1, characterized in that the device for further comprising:

imparting the spin to the fibre is with a device disposed downstream of the a device that continuously measures the interference pattern of the optical fibre configured to continuously irradiate the optical fibre.

6. (Currently Amended) [[A]] The method according to claim [[4]] 1, characterized in that said method comprises the following steps: i) setting a set value in the device for imparting spin to the optical fibre, ii) carrying out an interference pattern measurement on the optical fibre, iii) calculating, on the basis of the measured interference pattern, a measured value which represents the amount of spin in the optical fibre, and iv) comparing the set value of i) with the measured value of iii) and, if necessary, adjusting the set value until the desired amount of spin in the optical fibre is achieved further comprising:

determining an operating condition to achieve a desired spin for the optical fibre;
imparting the spin to the optical fibre based on the operating condition; and
adjusting the operating condition when the spin does not equal the desired spin.

7. (Currently Amended) [[A]] The method according to claim [[4]] 1, characterized in that the device for further comprising:

imparting the spin to the optical fibre is with a device comprising two pairs of wheels which rotate in opposite directions about the two different axes of rotation, between which wheels the optical fibre is passed, as a result of which spin is imparted to the optical fibre.

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wherein the wheels are ~~moveed~~ configured to move back and forth relative to one another in a direction substantially perpendicular to the optical fibre so as to roll the fibre alternately to the left and to the right between the wheel surfaces.